20

BRUHAT BANGALORE MAHANAGARA PALIKE

YELAHANKA ZONE

Name of work: Estimate for Improvements to Roads at Ashraya Layout Main Road and Cross Roads in Ward No. 11 (Kuvempunagara), Vidyaranyapura Sub Division.

								Estimate Cost Rs.	5000000.00
Sl No	Description of item	Unit	No	L	B	D	Qty	Rate	Amount
1	KSRRB 300-1. Earth work excavation by manual means in ordinary soil involving an average horizontal throw upto 2 meters and an average lift upto 0.5m, excavated surface leveled and sides neatly dressed, the disposed earth to be leveled neatly after breaking of clods complete as per specifications complete as per specifications MORTH chapter 3. **Page No. 138 / Item No. 19.1/ PWD SR 2014-15**	Cum							
	Desiltation of Road Side drains								
	4th Cross		2	65.00	0.45	0.25	14.63		
	2nd Cross		2	63.00	0.45	0.25	14.18		
	Cross Road		2	74.00	0.45	0.25	16.65		
	Masdhi Road		2	72.00	0.45	0.25	16.20		
	Galli		2	63.00	0.45	0.25	14.18		
			2	26.00	0.45	0.25	5.85		
			2	50.00	0.45	0.25	11.25		
			2	40.00	0.45	0.25	9.00		
	Ashraya Layout Cross Roads		2	166.00	0.45	0.25	37.35		
			2	166.00	0.45	0.25	37.35		
			2	140.00	0.45	0.25	31.50		
							208.13	75.60	**15734.00**
	Basic Rate	70.00							
	Area Weightage @ 8%	5.60							
	Total	**75.60**							
2	KSRRB 300-2. Earth work excavation by manual means in hard soil involving an average horizontal throw upto 2 meters and an average lift upto 0.5m, excavated surface leveled and sides neatly dressed, the disposed earth to be leveled neatly after breaking of clods complete as per specifications complete as per specifications MORTH chapter 3. **Page No. 138 / Item No. 19.2 / PWD SR 2014-15**	Cum							
	4th Cross		1	65.00	6.70	0.15	65.33		
	2nd Cross		1	63.00	5.00	0.15	47.25		
	Cross Road		1	74.00	4.70	0.15	52.17		
	Masdhi Road		1	73.00	5.00	0.15	54.75		
	Gulli		1	63.00	1.50	0.15	14.18		
			1	26.00	4.00	0.15	15.60		
			1	50.00	5.00	0.15	37.50		
			1	40.00	4.00	0.15	24.00		
	Ashraya Layout Cross Roads		1	166.00	5.00	0.15	124.50		
			1	166.00	5.00	0.15	124.50		
			1	140.00	5.00	0.15	105.00		
	Culvert		3	6.00	2.00	1.20	43.20		
							707.97	105.84	**74932.00**
	Basic Rate	98.00							

ordenary soil.

75-60 53522.53

Sl No	Description of item	Unit	No	L	B	D	Qty	Rate	Amount
	Area Weightage @8%	7.84							
	Total	**105.84**							
3	Removing B.S Slab of Drain and stacking **Page No. 25 / Item No. 5.32 / PWD SR 2014-15**	Sqm							
	4th Cross		2	35.00		1.35	94.50		
	2nd Cross		2	32.00		1.35	86.40		
	Cross Road		2	42.00		1.35	113.40		
	Masdhi Road		2	40.00		1.35	108.00		
	Galli		2	38.00		1.35	102.60		
			2	16.00		1.35	43.20		
			2	35.00		1.35	94.50		
			2	25.00		1.35	67.50		
							710.10	58.32	**41413.00**
	Basic Rate	54.00							
	Area Weightage @ 8%	4.32							
	Total	**58.32**							
4	Refixing stone slabs of drains and pointing in C.M (1:3) **Page No. 25 / Item No. 5.33 / PWD SR 2014-15**	Sqm							
			Qty Vide Item No. 2				**710.10**	75.60	**53684.00**
	Basic Rate	70.00							
	Area Weightage @ 8%	5.60							
	Total	**75.60**							
5	KSRRB M300-53: Construction of embankment with approved material Gravel/Murrum with all lifts and leads, transporting to site, spreading, grading to required slope and compacting to meet requirement table 300-2 complete as per specifications. (which includes cost of gravel/murrum, watering charges & compaction by vibratory roller) **MORTH specification No. 305, No. 144 / Item No. 19.60 / PWD SR 2014-15**	Cum							
			1	56.00	5.00	0.20	56.00		
	Ashraya Layout Cross Roads		1	166.00	5.00	0.25	207.50		
			1	166.00	5.00	0.25	207.50		
			1	140.00	5.00	0.25	175.00		
							646.00	220.32	**142327.00**
	Basic Rate	204.00							
	Area Weightage @8%	16.32							
	Total	**220.32**							

Sl No	Description of item	Unit	No	L	B	D	Qty	Rate	Amount
6	KSRB 4-1.3 : Providing and laying in position plain cement concrete of **mix 1:4:8 with OPC cement @ 180 kgs with 40mm** and down size graded granite metal coarse aggregates @ 0.85cum and fine aggregares @ 0.57 cum machine mixed, concrete laid in layers not, exceeding 15cms, thick, well compacted, in foundation and plinth, including cost of all materials, labour, HOM of machinery, curing complete as per specifications. Specification No. KBS 4.1,4.2. **No. 12/ Item No. 4.3/ PWD SR 2014-15**	Cum							
	4th Cross		1	65.00	6.70	0.15	65.33		
	2nd Cross		1	63.00	5.00	0.15	47.25		
	Cross Road		1	74.00	4.70	0.15	52.17		
	Masdhi Road		1	73.00	5.00	0.15	54.75		
	Gulli		1	63.00	1.50	0.15	14.18		
			1	26.00	4.00	0.15	15.60		
			1	50.00	5.00	0.15	37.50		
			1	40.00	4.00	0.15	24.00		
	Culvert		3	6.00	2.00	0.15	5.40		
							316.17	4847.04	**1532489.00**
	Basic Rate	4488.00							
	Area Weightage @8%	359.04							
	Total	**4847.04**							
7	KSRB 5.4-3: Providing and constructing granite / trap / basalt size stone masonry in **superstructure with cement mortar 1:6**, edges of stones chistle dressed in courses not less than 15 cms high, bond stones at two m. apart in each course including cost of materials, labour, curing complete as per specifications.KBS 5-1.13 **Page No. 23 / Item No. 5.12 / PWD SR 2014-15**	Cum							
			3x2	6.00	0.60	0.90	19.44		
							19.44	4773.60	**92799.00**
	Basic Rate	4420.00							
	Area Weightage @ 8%	353.60							
	Total	**4773.60**							
8	KSRB 15.1.4: Providing ruled pointing to coursed stone masonry with cement mortar 1:4, 20 mm deep, after raking joints to depth of 20mm nicely lining, including cost of materials, labour, curing complete as per specifications cement mortar 1:4. **Page No. 109 / Item No. 15.4 / PWD SR 2014-15**	Sqm							
			3x2	6.00		0.90	32.40		
							32.40	92.88	**3009.00**
	Basic Rate	86.00							
	Area Weightage @ 8%	6.88							
	Total	**92.88**							

Sl No	Description of item	Unit	No	L	B	D	Qty	Rate	Amount
9	KSRB 4-1.6 : Providing and laying in position plain cement concrete of **mix 1:2:4 with cement @ 240 kgs with 20mm** and down size graded granite metal coarse aggregates @ 0.878 cum and fine aggregates @ 0.459 cum, machine mixed, concrete laid in layers not exceeding 15cms, thick, well compacted, in foundation, plinth and cills, including cost of all materials, labour, HOM of machinery, curing complete as per specifications, specification. No. KBS 4.1,4.2. **No. 12/ Item No. 4.6/ PWD SR 2014-15**	Cum							
	Pointing		3	6.00	1.80	0.10	3.24		
	Ramp		3x2	6.00	1.00	0.15	5.40		
							8.64	5327.64	**46031.00**
	Basic Rate	4933.00							
	Area Weightage @ 8%	394.64							
	Total	**5327.64**							
10	KSRB 4.2.2 : Providing and laying in position **reinforced cement concrete of design mix M20 with OPC cement @ 320 kgs, with 20mm and down size graded granite metal**, coarse aggregates @ 0.878 cum and fine aggregates @ 0.459 cum with superplastisiser @ 3lts confirming to IS 9103-1999 reaffirmed-2008 machine mixed, concrete laid in layers not exceeding 15cms thick, vibrated for all works in foundation plinth and ground floor level for roof slabs, staircase, lintels, retaining walls, walls (any thickness) including attached plasters, column, piers, abutments, pillars, posts, struts, buttresses, string or lacing courses, parapets, coping, bed blocks, anchor blocks, plain window cills, fillets etc, including cost of all materials, labour, HOM of machinery, curing, complete as per specifications. Specification No. KBS 4.1,4.6, **No. 13/ Item No. 4.11/ PWD SR 2014-15**	Cum							
			3	6.00	1.80	0.23	7.45		
							7.45	6065.28	**45198.00**
	Basic Rate	5616.00							
	Area Weightage @ 8%	449.28							
	Total	**6065.28**							
11	KSRB 4.9.1: **Providing mild steel reinforcement for R.C.C work** including straightening, cutting, bending, hooking, placing in position, lapping and / or welding wherever required, tying with binding wire and anchoring to the adjoining members wherever necessary complete as per design (laps, hooks and wastage shall not be measured and paid) cost pf materials, labour, HOM of machinery complete as per specifications.Specification No. KBS 4.6.3 **Page No. 17 / Item No. 4.45 / PWD SR 2014-15**	Qtl							

Sl No	Description of item	Unit	No	L	B	D	Qty	Rate	Amount
	For Roof, Columns @ 90 Kg / Cum		0.90	7.45			**6.71**	7975.80	**53492.00**
	Basic Rate	7385.00							
	Area Weightage @ 8%	590.80							
	Total	**7975.80**							
12	KSRB 4-6.4 : Providing and removing centering, shuttering, strutting, propping etc., and removal of form work for **vertical surface such as walls at any thickness**, including attached pilasters, buttresses, plinth and string courses cost of all materials, labour complete as per specifications. Specification NO KBS 4.6.2 **Page No. 15 / Item No. 4.31/ PWD SR 2014-15**	Sqm							
			3	6.00	0.60		10.80		
			3x2	6.00		0.23	8.28		
			3x2	1.80		0.23	2.48		
							21.56	292.68	**6311.00**
	Basic Rate	271.00							
	Area Weightage @ 8%	21.68							
	Total	**292.68**							
13	KSRB- 4-1.5 : Providing and laying in position plain cement concrete of **mix M20 with OPC cement @ 300 kgs, with 20mm** and down size graded granite metal coarse aggregates @ 0.64 cum and fine aggregares @ 0.43 cum with superplastisiser @ 3lts confirming to IS9103-1999 reaffirmed-2008, machine mixed, concrete laid in layers not exceeding 15cms, thick, well compacted, in foundation, plinth and cills, including cost of all materials, labour, HOM of machinery, curing complete as per specifications, specification. No. KBS 4.1,4.2, **No. 12/ Item No. 4.5/ PWD SR 2014-15**	Cum							
	4th Cross		1	65.00	6.70	0.10	43.55		
	2nd Cross		1	63.00	5.00	0.10	31.50		
	Cross Road		1	74.00	4.70	0.10	34.78		
	Masdhi Road		1	73.00	5.00	0.10	36.50		
	Gulli		1	63.00	1.50	0.10	9.45		
			1	26.00	4.00	0.10	10.40		
			1	50.00	5.00	0.10	25.00		
			1	40.00	4.00	0.10	16.00		
							207.18	5852.52	**1212525.00**
	Basic Rate	5419.00							
	Area Weightage @8%	433.52							
	Total	**5852.52**							
14	Vaccum De-watering with vaccum pump and suction mat and compaction with skin floater clubbed with floating disc including cost of generator HOM of machinery Screed Vibratiry, Power Floater, blade and disc etc., with all lead and lift No. **171 / Item No. 22.7 / PWD SR 2014-15**	Sqm							
	4th Cross		1	65.00	6.70		435.50		
	2nd Cross		1	63.00	5.00		315.00		
	Cross Road		1	74.00	4.70		347.80		
	Masdhi Road		1	73.00	5.00		365.00		

Sl No	Description of item	Unit	No	L	B	D	Qty	Rate	Amount
	Gulli		1	63.00	1.50		94.50		
			1	26.00	4.00		104.00		
			1	50.00	5.00		250.00		
			1	40.00	4.00		160.00		
							2071.80	97.20	**201379.00**
	Basic Rate	90.00							
	Area Weightage @8%	7.20							
	Total	**97.20**							
15	Providing groove cutting for **cement pavement** wifth of 5mm to 10mm and depth 800mm-100mm including cost of cutting machine, generator and HOM of machinery, including cost of blade, coolant etc, including cleaning of groove and providing sand and hot bitumen fillarsm and filler metal etc including of conveyance of all materials, labour, lead and lift charges and all other incidental charges as per drawing and as per specifications **Page No. 172 / Item No. 22.8 / PWD SR 2014-15**	Rmt							
			2	6.70			13.40		
			3	5.00			15.00		
			3	4.70			14.10		
			2	5.00			10.00		
			3	1.50			4.50		
			3	4.00			12.00		
			3	5.00			15.00		
			3	4.00			12.00		
							96.00	124.20	**11923.00**
	Basic Rate	115.00							
	Area Weightage @8%	9.20							
	Total	**124.20**							
16	Providing, laying, spreading and compacting graded stone aggregate to **wet mix macadam** specification including premixing the Material with water at OMC in mechanical mix plant carriage of mixed Material by tipper to site, laying in uniform layers with paver in sub-base / base course on well prepared surface and compacting with vibratory roller to achieve the desired density complete as per specifications **P. 154 / I. 20.18 PWD SR - 2014-15**	Cum							
	Ashraya Layout Cross Roads		1	166.00	5.00	0.15	124.50		
			1	166.00	5.00	0.15	124.50		
			1	140.00	5.00	0.15	105.00		
							354.00	1438.56	**509250.00**
	Basic Rate	1332.00							
	Area Weightage @ 8%	106.56							
	Total	**1438.56**							

Sl No	Description of item	Unit	No	L	B	D	Qty	Rate	Amount
17	KSRRB 500-1.1 : **Cleaning the existing WBM** road surface including removing of binding materials and other foreign matter with wire bushes and small picks, sweeping with brooms or soft brushes and finally dusting with old gunny bags and / or compressed air to receive bituminous treatment including cost of all materials, labour, HOM of machineries, curing complete as per specifications. Specification No. 500-1.3 **P. 157 / I. 21.1 PWDSR 2014-15**	Sqm							
	Ashraya Layout Cross Roads		1	166.00	5.00		830.00		
			1	166.00	5.00		830.00		
			1	140.00	5.00		700.00		
							2360.00	12.20	**28801.00**
	Basic Rate	11.30							
	Area Weightage @ 8%	0.90							
	Total	**12.20**							
18	KSRRB M500-6: **Providing and applying primer coat for surfaces of medium porosity** like cement stabilized soil base @ 1.10 Kg/Sqmt over prepared surface with S.S bitumen emulsion using bitumen tanker fitted with spray set (excluding cleaning of road surface) including cost of all material, labour HOM of machineries complete as per specifications. MORTH specification NO. 502, **Page No. 157 / Item No. 21.5 / PWD SR 2014-15**	Sqm							
			Qty Vide Item No. 5				2360.00		
							2360.00	74.52	**175867.00**
	Basic Rate	69.00							
	Area Weightage @ 8%	5.52							
	Total	**74.52**							
19	KSRRB M500-18: Providing and laying **semi dense bituminous concrete** using crushed aggregates of specified grading, premixed with bituminous binder and filler, transporting the hot mix to work site, laying with a paver finisher to the required grade, level and alignment, rolling with smooth wheeled, vibratory and tandem roller to achieve the desired compaction as per MORTH specifications clause No. 508 complete in all respects as per specifications. **using 100-120 TPH capacity H.M.P with sensor paver grading II (25-30mm) with 5% CRMB-55 grade, No. 160 / Item No. 21.21.2 / PWD SR 2014-15**	Cum							
	Ashraya Layout Cross Roads		1	166.00	5.00	0.025	20.75		
			1	166.00	5.00	0.025	20.75		
			1	140.00	5.00	0.025	17.50		
							59.00	11070.00	**653130.00**
	Basic Rate	10250.00							
	Area Weightage @ 8%	820.00							
	Total	**11070.00**							

Sl No	Description of item	Unit	No	L	B	D	Qty	Rate	Amount
10	Lead for Disposal of Debris shall be payable at carriage rates by Mechanical means inlcuding loading and unloading. From 0.00 to 2.00 Km	Cum							
			Vide Item No. 1+2				752.32	73.57	55348.00
	Average weight of earth 1.28 tonne / kg for 2x1.28x2.00=5.12	5.12							
	Add loading and unloading charges Vide item no.17.1 P.no.130	63.00							
		68.12							
	Area Weightage @ 8%	5.45							
	Total	73.57							
11	Sub Total								4950039.00
12	Third Party Inspection Charges @ 1%								49500.00
13	Miscesallaneous Charges	L/S							461.00
								Total	5000000.00

(Rupees Fifty Lakhs Only)

CERTIFICATE

1 The work spot has been inspected and the work is found necessary.
2 This estimate is prepared as per PWD SR of 2014-15.
3 This work included under Dupt Mayor Grants 2014-15.
4 The provisions were made in this estimate are necessary and adequate.
5 This works come under B.B.M.P. limits.

Asst. / Jr. Engineer

Assistant Executive Engineer
Bruhat Bangalore Mahanagara Palike
Vidyaranyapura Sub Division

Executive Engineer
Bruhat Bangalore Mahanagara Palike
Byatarayanapura Division

ADMINISTRATIVELY SANCTIONED FOR Rs.....
Rupees Fifty lakhs
Under P-2178.
Registered as EE ( ) No 9.....9.....
Subject to conditions contained in
enclosed memo EE ( ) No /9/....
Dt Estimate A/Sanctioned
No 1027
dated 22/12/14 Rs 50.00L

Addl Joint Commissioner
(Yelahanka Zone)
BBMP. Bengaluru-92.

Technical Sanction for Rs. 50.00 Lakhs
Fifty Lakhs only
P-2178
Registered as EE 08 22-12-14
conditions contained therein.
No: 30/14-15 Dt: 22-12-14
AE/JE
EE (BTP.Div.)